

CLAIMS

We claim:

- 5 1. A method for migrating an open network connection comprising:
encapsulating one or more active processes and a system environment relating to said
processes into a compute capsule;
assigning said compute capsule a unique locator;
establishing one or more open network connections between said compute capsule and one
10 or more other compute capsules;
migrating said compute capsule;
re-establishing said open network connection using said unique locator.
2. The method of claim 1 wherein said unique locator is an IP address and a
15 network locator.
3. The method of claim 2 wherein said unique locator is stored using a directory
service.
- 20 4. The method of claim 3 wherein said directory service uses LDAP or DNS.
5. The method of claim 1 wherein migrating said compute capsule is performed
within a kernel.

6. The method of claim 1 wherein migrating said compute capsule is performed within specialized routers.

7. The method of claim 1 wherein re-establishing said open network
5 connection using said unique locator is performed within a kernel.

8. The method of claim 1 wherein re-establishing said open network connection using said unique locator is performed within specialized routers.

10 9. A computer program product comprising, a computer usable medium having computer readable program code embodied therein configured to migrate an open network connection, said computer product comprising:

computer readable code configured to cause a computer to encapsulate one or more active processes and a system environment relating to said processes into a compute capsule;

15 computer readable code configured to cause a computer to assign said compute capsule a unique locator;

computer readable code configured to cause a computer to establish an open network connection between said compute capsule and one or more other compute capsules;

20 computer readable code configured to cause a computer to migrate said compute capsule; and

computer readable code configured to cause a computer to re-establish said open network connection using said unique locator.

10. The computer program product of claim 9 wherein said unique locator is an IP address and a network locator.

5 11. The computer program product of claim 10 wherein said unique locator is stored using a directory service.

12. The computer program product of claim 11 wherein said directory service uses LDAP or DNS.

10 13. The computer program product of claim 9 wherein migrating said compute capsule is performed within a kernel.

14. The computer program product of claim 9 wherein migrating said compute capsule is performed within specialized routers.

15 15. The computer program product of claim 9 wherein re-establishing said open network connection using said unique locator is performed within a kernel.

20 16. The computer program product of claim 9 wherein re-establishing said open network connection using said unique locator is performed within specialized routers.